

The
APPROACH
to
WOMANHOOD



THE CENTRAL COUNCIL FOR HEALTH EDUCATION
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It is most important for us all to know something of this body of ours, and yet when we stop to think, we realise how little we really know of its workings, and how often we follow certain rules of sleeping and eating, exercise and rest without understanding why. Yet anyone having a motor-car makes some effort to get to know how it works, and so guard against breakdowns. How much more important it must be to know something of the far more complicated machinery of the body.

Let us first consider the way in which the body is governed by the mind. The older we grow, the more we realise how closely body and mind are related, and how the health of the one affects that of the other. We know that exercise and open air, rest and sleep are important both for our minds and our bodies, and that when we are busy and happy, we usually feel fit.

We all know the general appearance of the human body, and that, in spite of certain differences, men and women closely resemble each other in their main features.

HOW THE BODY WORKS.

Let us therefore take the various parts of the body and look at them in more detail, see what work they have to do, and how they do it.

BRAIN AND NERVES.

We will start with the head, because it contains the brain, which governs the other activities of the body. Grouped about the head are found nearly all the structures known as sense organs, such as the eyes, ears, nose, tongue and palate, which brings us knowledge of the world around us.

The actual way in which the brain works is exceedingly complicated, and is not completely understood by even the cleverest people. But we all know that it is in the brain that we think and remember. By means of tiny threads, called nerves, it receives messages from the outside world—sensations—through the skin and other sense organs, and sends to all parts of the body by another set of nerves the messages that make them work as they do. It is a very delicate structure, and is protected from injury by several coverings, including the bones of the skull.

How do we see and hear? It would take too long to explain this fully, but we know that light, which travels in waves (about which we now hear in television), reaches that part of the eye called the retina, which sends a message to the brain, giving rise to the sensation of seeing. In a similar way the sound waves beat upon a part of the ear known as the drum, and the vibrations thus set up is communicated to a nerve, which sends the impulse to the brain, where it is translated into the sensation of hearing.

From the head we will pass to the trunk, for the limbs explain themselves; we know the work done by the arms and legs, and we know that all their movements are in response to messages carried by the nerves.

The trunk is divided by a large muscle, the diaphragm, into two big cavities called the chest and the abdomen.

HEART AND LUNGS.

In the chest we find the lungs and the heart. There are two lungs lying side by side, and with them we breathe, *i.e.*, we take in (inhale) fresh air, and give out (exhale) impure air. Fresh air contains 1 part in 5 of oxygen, and in the lungs some of this oxygen is taken up by the blood and carried to every part of the body. In the lungs also the blood gives up certain waste products it has collected, the most important of which is carbon dioxide, and these are exhaled. Oxygen is needed by all living

creatures, and if the blood is to obtain it in sufficient quantity, we must breathe in really fresh air. Now we see why it is important to keep the windows open day and night, to get out into the open air whenever possible, and to expand our chests by holding ourselves well and doing deep breathing exercises.

The heart may be likened to a pump driving the blood through tubes called arteries to every part of the body.

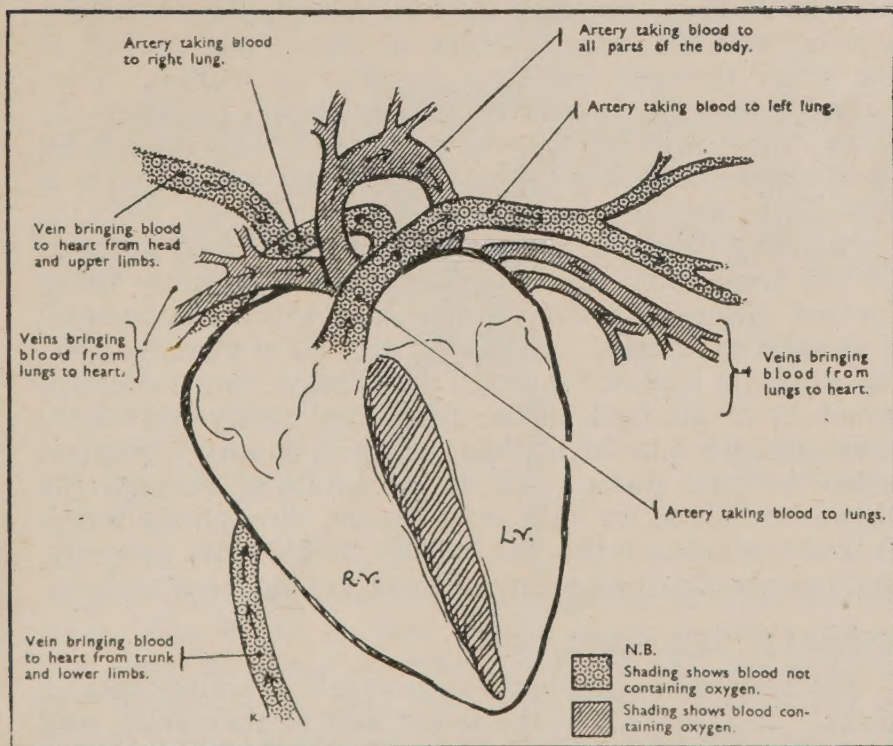
The blood leaving the heart on this journey is red, pure blood, containing oxygen, and nourishment supplied by the food we eat. The big tubes leading from the heart divide again and again until they at last become tiny thread-like tubes with very thin walls, through which the nourishment and oxygen pass into our bones, muscles and other tissues. The blood which has thus lost some of its nourishment and oxygen and taken up carbon dioxide, and various other substances, is collected in a different set of thread-like vessels, and eventually these join to form larger ones, called veins. While travelling back to the heart the blood collects a new supply of food material. As, however, it has given up its oxygen, it must obtain a fresh supply and is therefore sent from the heart to the lungs, where it gets rid of its carbon dioxide and obtains in exchange oxygen.

After this it goes back to the heart, and from there is once more sent on its journey round the body. This process goes on without stopping, the heart contracting to pump the blood out and expanding to let it in between 70 and 80 times a minute. There is a rest period between each beat, and at night, when we are lying down, the beating itself is slower than when we are working or rushing about.

DIGESTIVE ORGANS.

The greater part of the abdominal cavity is filled by the structures which carry out the processes of digestion,

CIRCULATORY SYSTEM.



and of taking the food into the body. Digestion starts in the mouth ; here the food is broken up by the teeth and mixed with the saliva. It is very important to break the food up well, so that it comes into contact with the digestive juices ; for this purpose the teeth must be used and enough time spent in chewing the food. If the cleaning of and attention to the teeth is neglected they decay, and are so painful when we come to eat that we do not chew our food properly and may also swallow with the food poison from the decayed teeth. From the mouth the food passes to the stomach, where the digestive juices work upon it. It has a long journey from here through

the small intestine, during which all the part that can be used as food is absorbed into the blood, the remainder passing into the large intestine or bowel and so out of the body through the back passage or rectum. It is essential that the bowels should be opened regularly, as, if not, the body may become poisoned. This may result in headaches and in a feeling of slackness which makes it difficult to do one's work properly.

Not only must the body get rid of the unused portions of our food, but other substances are constantly being formed through the body's activities, which are harmful if allowed to remain. The blood gets rid of these by passing them (1) in water through the kidneys, two structures which lie at the back of the abdominal cavity and empty their contents into the bladder, which in its turn is emptied when we pass water ; (2) in perspiration, through the skin ; and (3) as we have already seen, through the lungs. It is very important that the kidneys should work properly. and one should drink plenty of water to help them to do so.

FEMALE SEX ORGANS.

The abdominal cavity contains other structures besides these. In a woman in the lower part of the cavity, well protected by strong bones as well as muscles, lie those organs which have the work of helping to make new human beings.

First there are the two ovaries, one on either side of the womb or uterus. Two tubes which begin near the ovaries lead into the uterus, a pear-shaped hollow organ with strong muscular walls ; at its narrow lower end the uterus leads into the vagina, a narrow passage leading to the outside of the body between the opening of the bladder and that of the bowel or rectum.

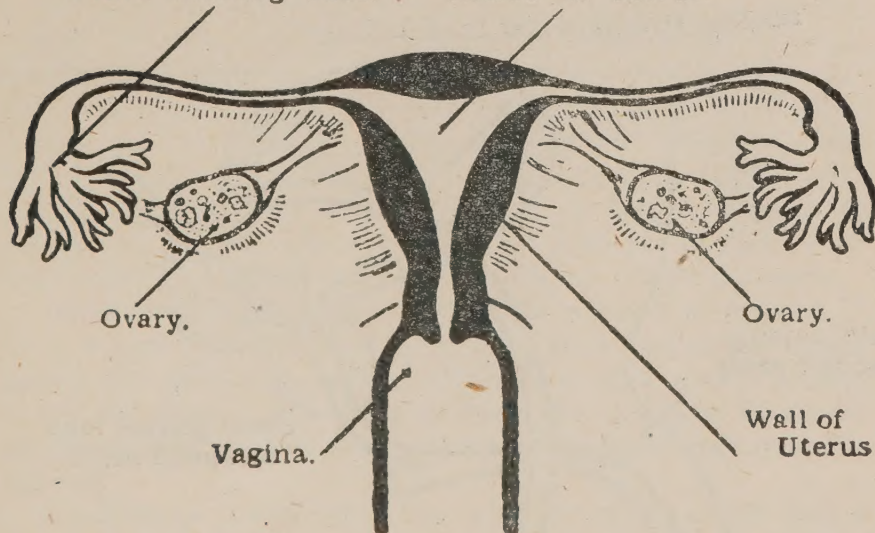
The ovaries (after the age of 12 or 13) begin to produce the female egg cells or ova (plural ova, singular ovum). One ovum is normally produced every month by one or

FEMALE REPRODUCTIVE ORGANS.

Showing ovaries, tubes, uterus, vagina, etc.

Ovum entering tube.

Hollow of Uterus.



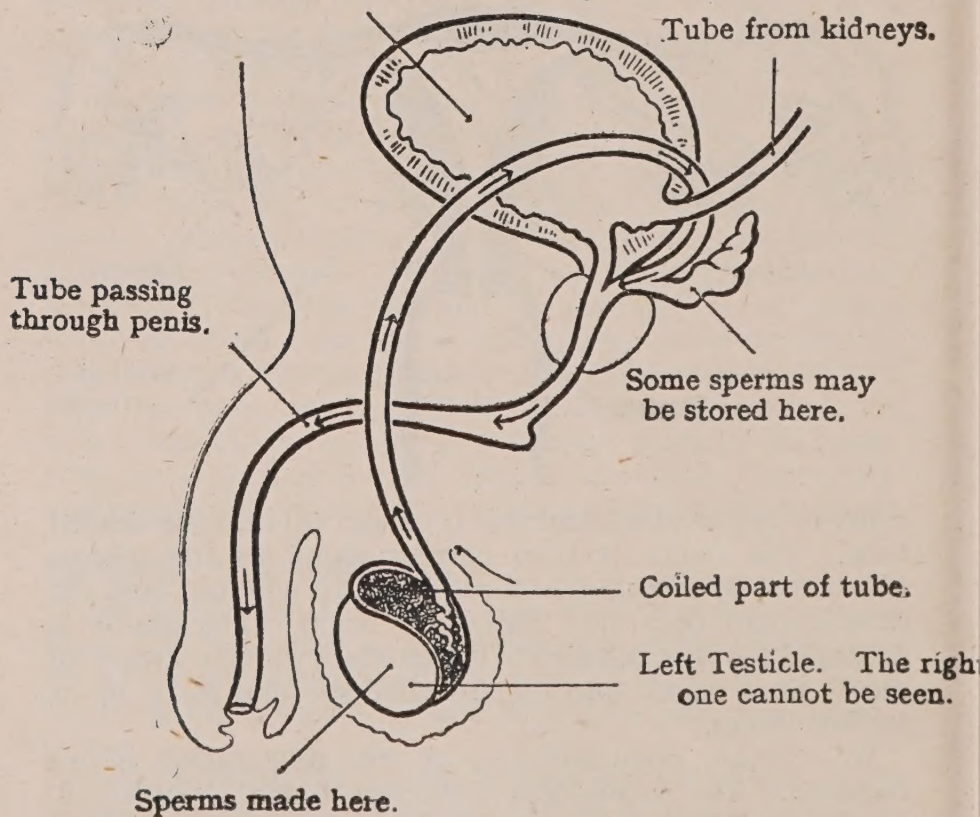
other of two ovaries, and this is caught up into the nearest tube. The ovum is then carried along to the uterus. If it is met by a male sperm cell, the two will join, and the development of a new baby will begin. The uterus is prepared for this possibility by getting a greater supply of blood than usual, and certain changes take place in its surface lining.

In ordinary circumstances, all this preparation is not required. The ovum does not meet a male sperm cell, breaks up and disappears. The increased supply of blood not now required is passed out through the vagina, along with some of the surface shreds. This function is known as menstruation, or the monthly period, and its first occurrence shows that the ovaries have begun to work. As an ovum leaves one of the ovaries about once in every three or four weeks, menstruation occurs about once a month also, and lasts from four to five days. It is quite

MALE SEX ORGANS.

Showing where sperms are made and how they travel.

Bladder storing water from kidneys.



an ordinary process in the life of a woman and need cause no anxiety. When the periods first begin, a girl may feel rather tired, though it is not usual for healthy girls to suffer any feelings of illness. What is the best way to live at those times?

Exercise should be taken, but in the early days when this new habit of the body is becoming established it may

be wise to rest rather more than usual, although ordinary exercise and games are good.

Great attention must be paid to procuring a regular action of the bowels, as constipation often brings on pain. Cleanliness, always important, is even more necessary than usual, and wherever possible a warm or tepid bath should be taken daily. A healthy girl will be able to live her ordinary, normal life, and whenever girls suffer from headache, backache or lasting pain, a doctor should be consulted. Often more exercise is needed, as pain may be caused by the blood not circulating freely enough.

Now what is the real meaning of the woman's "Period"? It is a sign that the young girl's body is beginning to get ready for marriage and motherhood, and every month from the time it first appears until she is about 45 or 50 an egg-cell within her is ripened, and finds its way into the uterus.

As already mentioned, the meeting of an ovum and a sperm is the beginning of a new baby. We must explain this now more fully.

Every child has a father as well as a mother, just as have nearly all animals, and the egg-cell will only grow into a baby if a male sperm cell from the body of a man joins with it. The man is therefore provided with two organs corresponding to the ovaries, in which millions and millions of very small sperm cells are formed continuously. These spermatazoa, as they are called, are stored in the body of the man, and at the moment of mating are discharged into the body of the woman together with a fluid called semen in which they freely swim.

ACT OF MATING.

In the act of mating the male organ is inserted into the vagina, so that the seminal fluid containing the sperm cells is discharged near the mouth of the uterus. The term most often used for this act is "sexual intercourse,"

and it is the closest act of union that can take place between a man and a woman. The sperms swim from the vagina up the uterus to the tubes, and if an ovum happens to be there, one of them will join with it, thus forming a fertilised ovum.

GROWTH OF A NEW LIFE.

At first this fertilised ovum, which may be compared to the seed of a plant, and which we call the embryo, is very minute, it would require a microscope to see it clearly ; but fed through the mother's blood, and protected within her, it gradually grows into the shape of a human baby, and at the end of nine months is ready to come forth into the world and start life on its own. These months of hidden growth are known as pregnancy, and the mother during this time has to take great care to keep well and strong, both for her own sake and the baby's future.

A young girl needs to keep mind and body healthy in preparation both for eventual marriage and motherhood and for all the other amusing and useful things that she may want to do ; if life is to be lived in all its fullness, health is the first essential.

ADOLESCENCE.

The work of the ovaries is not confined to producing and discharging the ova—they also manufacture a fluid substance known as a hormone, which they pour into the blood stream, so that it reaches every part of the body. This secretion has a great influence on the whole physical and mental development of the girl.

It accounts, first of all, for the well-marked signs of development that take place apart from the first appearance of the monthly period—the breasts become larger, hair grows on various parts of the body, and the muscles and bones of the abdomen and pelvic girdle increase in strength. The girl's thoughts and feelings, too, begin to undergo a change, and she gradually realises that boys are different from herself in all sorts of ways. She begins

to want to decide things for herself and to be independent. In fact, she is growing up, developing the appearance and character of a woman, and becoming able to take her share in the full life of the grown-up person. For most girls this means working to earn one's own living, being able to chose one's amusements, hobbies and friends, and in time meeting the man for whom one cares so much that one wants to share the future with him and, with him, build up a home and family.

Changes of much the same kind take place in the boy, for just as the ovaries produce a substance which helps the girl to become a woman, so the testicles produce, in addition to the sperm cells, a substance which, passing into the blood, brings about the development of manhood.

The young man increases greatly in muscular strength and vigour, and needs to use his powers in games, sports, and trials of skill ; hair grows on various parts of his body, his voice deepens, and between the age of 16 and 18 he is likely to become aware of the attractiveness of girls ; he, too, is growing up, trying to make his way in the world, and looking forward with some perplexity and yet with eagerness to the time when he will meet one particular girl whom he will choose as his life partner.

The body requires time to get used to the changes that have been described. For several years the organs which have become active will be learning how to work easily and harmoniously with the rest of the body. It is essential, if strong healthy children are to be born, that the power of producing new life should not be used too soon.

The mind and character, too, which, as we have seen, are much affected by the bodily changes, need time to develop if young men and women are to be qualified to accept the responsibilities of parenthood as well as the joys of marriage.

In their teens, young people are inclined to think much of their own affairs, some are preoccupied with

having a good time, others with preparing for a career ; others, again, with developing some special talent or gift. Often they have dreams of doing great things for the community, but whatever their pre-occupations may be, they concern chiefly their own lives ; this is natural and right since every human being should achieve full independence, and know the aim and purpose of his existence. It is only when this time of preparation is over, and the young man or woman is fully adult, that he or she is fit to undertake the joys and responsibilities of home making and parenthood, which are the normal result of the union between man and woman.

Before this settling down time comes, boys and girls are likely both to attract and to be attracted by individuals of the opposite sex ; they will make friends with each other, sometimes changing quickly and often in their likings, sometimes being true to the same partner for long periods. This is both natural and desirable, for both body and mind need time and preparation if the full happiness of marriage and parenthood is to be experienced.

SEX ATTRACTION.

It is these years of preparation—what one may perhaps call a “ waiting time ” between the development of the powers of sex and their full use—that are sometimes a difficulty. Two young people may be very strongly attracted to each other, so attracted that their one desire is to “ mate,” yet they may feel that this strong attraction will not last, and that to marry because of it would be wrong and foolish ; furthermore, even if they are sure that their attraction is “ love ” in its truest sense, marriage may seem impossible for many reasons. What are they to do ? Is it wrong to “ mate ” outside marriage ? They know some people who do. If they take care not to have a child, what is the harm ? Sometimes the girl leads the man on, and tries to break down his scruples. In her eagerness

to show that she is unhampered by regard for principle or conventions she may find herself lowered in her lover's eyes. At other times it is the young man who uses every persuasion he can think of, and the girl, who would probably prefer to say "no," is afraid she may lose him altogether if she persistently refuses. Besides, one side of her wants to agree ; it is so delightful to be loved and caressed by one who, for the time being, at any rate, is dearer than anyone else in the world.

CONTROL OF IMPULSES.

Now, if one waits until one is "in love" in this way—and being "in love" is not always the same thing as loving—it is almost impossible to think clearly and straight, since one's feelings are pulling so strongly in one direction that one may either follow them blindly or turn violently the other way, perhaps giving up all friendships with men, and feeling that everything to do with sex, even marriage itself, is wrong and sinful ; it is therefore a good thing to think out the whole question before it becomes a burning one in one's own life.

One thing that is important to understand is that the mating of two people alters their whole relationship to each other, and things are never quite the same again. This is particularly true of the girl, whose sex feelings, although they are often less intense than those of the man, are much deeper and more prolonged ; once a woman is awakened by full sex intercourse, she tends to need and to desire affection, tenderness and consideration, and these needs are very much increased if she becomes pregnant ; for her, therefore, a casual sex encounter is often a tragedy, while a happy marriage provides an assurance that passion will be combined with unselfish love.

Apart from this, there are certain practical reasons why it is both unwise and wrong to indulge in sex intercourse before marriage. For one thing there is the

possibility of bringing a child into the world even though the couple may try to guard against it. Too often the girl is left to meet the full responsibility of parenthood, and the child never experiences the safety of a happy, settled home ; in addition to having no father, he may have very little contact even with his mother, since she is probably fully engaged in earning enough for both of them. It is selfish and therefore wrong to bring a child into the world for whom there is neither home nor welcome, and however much the mother may love her baby, she cannot successfully be both father and mother.

The second reason is that casual sex relationships are likely to result in infection with venereal disease. Too often the unscrupulous man who persuades a girl to give him all he asks is himself suffering either from syphilis or gonorrhoea, or possibly both. He may then pass them on to his partner and the results may be very serious.

Gonorrhoea and syphilis are germ diseases and unless treated promptly and cured may cause great injury to a woman's health. Gonorrhoea may so damage the reproductive organs that a woman can no longer have a child and sometimes has to undergo a serious operation : if the disease attacks the joints, as it sometimes does, crippling and severe rheumatism may result.

Untreated syphilis may cause eye trouble, deafness, heart disease and even, in its later stages, insanity. If a woman infected with syphilis becomes pregnant, she may pass the disease on to her child.

Both these diseases are curable and early treatment is most important, and it cannot be too strongly emphasised that any man or woman noticing suspicious signs after having run the risk of infection should consult a doctor at once. Any sore in the region of the sex organs or any unusual discharge may be regarded as suspicious signs.

PRACTICAL ADVICE.

Treatment can be obtained free and under conditions of complete secrecy from practically all the big hospitals or from a special clinic. Any girl who fears she may have contracted one of these diseases should either go at once to see her own doctor or write to the Medical Adviser of the Central Council for Health Education, Tavistock House, Tavistock Square, W.C.1, for particulars of the nearest treatment centre.

Since syphilis can be passed on from mother to child during pregnancy it is vital that any woman who suspects that she is infected should have treatment before the baby is born ; otherwise the child may be either so weak that it dies shortly after birth, or may live only to develop blindness or deafness or even mental deficiency. Treatment begun in time means a living and healthy baby.

It is right that girls should know these facts, but one need not be frightened by them. A girl who respects herself and insists that her men friends should respect her need never become infected. The diseases are practically always passed on by sexual intercourse and it is rarely that infection takes place in any other way ; the girl who refrains from sex intimacy before marriage and who chooses a partner healthy both in body and mind can feel assured that these diseases at any rate will pass her by.

MARRIAGE.

The institution of marriage is found among all races and peoples, and we find that it always implies a public declaration by a man and a woman that from henceforth they belong to each other in a special way, that they intend to share the responsibility of looking after any children that may be born to them.

Marriage customs are very different in different parts of the world, but gradually men and women have realised that the happiest and most successful unions are those

in which a man mates with one woman only, the two remaining faithful to each other throughout life.

One finds, therefore, that the Christian ideal of marriage is a union where both partners "mate" for the first time and remain true to each other as long as they both live.

This ideal becomes possible only when "sexual intercourse" is valued not simply for itself, but because it is the expression of a union of two human beings in bonds of sympathy and love ; a longing for this deeper union is, although one does not always realise it, part of one's human nature, and therefore until a girl finds a man with whom she can share her thoughts and ideals, and who values her whole personality and not only her attractiveness, she should avoid physical intimacies however strongly she may sometimes desire them.

It is not always realised how very near the surface the desire for union with the other sex lies, especially in the man ; it may be aroused in him by things which to the girl are of little importance, *e.g.*, by kisses and casual embraces ; it is unfair to a man or boy to arouse in him desires which at times make it very difficult for him to remain controlled and considerate. The girl's feelings are not aroused so quickly, although they may last longer once they are aroused ; a girl, therefore, may often have to give up demanding much petting and kissing if she is to help both her boy and herself to behave with restraint.

It is good that boys and girls should enjoy each other's friendship, since they may do much to help each other in the business of growing up ; they will probably fall in and out of love several times before finding their real mate ; there may even, as we have seen, be a desire for union, since the instinct of mating is so strong. Out of respect both to themselves and each other, however, and because of the "yet better things to come," they should not gratify that desire prematurely, lest they spoil the delight of the deeper love, which is the beginning, as it is **the crown, of marriage.**